

# PATENT SPECIFICATION

DRAWINGS ATTACHED

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## COMPLETE SPECIFICATION

### Graduated Grading Stick

We, HYGRADE FOOD PRODUCTS CORPORATION, a corporation organized under the laws of the State of New York, United States of America, of 2811 Michigan Avenue, Detroit, Michigan, United States of America, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a graduated grading stick for measuring the back fat and carcass length of butcher carcasses working from the belly side of the hanging carcass.

In meat packing establishments it is common practice for an inspector to grade each butcher carcass such as hogs, etc. The pertinent factors which the inspector takes into consideration in determining the grade of each butcher carcass are its quality, conformation and meatiness. These latter factors are determined by the weight of the butcher carcass, its length and the thickness of the back fat. It has heretofore been the practice to make these measurements with ordinary measuring instruments which are cumbersome to use and often result in inaccurate measurements.

In view of the foregoing it is the primary object of the present invention to provide a graduated grading stick which is inexpensive to manufacture and simple to use.

Another object of the present invention is to provide a graduated grading stick which will quickly and conveniently permit the measurement of carcass length and thickness of back fat.

A further object of the present invention is to provide a graduated grading stick which will mechanically aid the inspector in determining the grade of each butcher carcass.

These and further objects of the present invention will appear from the following detailed description of the invention to be read in conjunction with the accompany-

ing drawings wherein like numerals in the several views represent the same component parts.

In the drawings:

Figure 1 is a perspective view of the graduated grading stick of the present invention. 50

Figure 2 illustrates the use of the graduated grading stick of the present invention in measuring the length of a butcher hog, and 55

Figure 3 illustrates the use of the graduated grading stick of the present invention in measuring the back fat of a butcher hog.

Referring now to the drawings, the graduated grading stick of the present invention includes an elongated rod 10 and a flange 11 secured to one end of the rod 10 and extending perpendicularly therefrom such that the included angle therebetween is 90 degrees. The flange 11 may be secured to or formed integrally with the rod 10. 60

The rod 10 must be equal to or greater in length than the greatest length of butcher carcass to be measured for a purpose to be presently described. As illustrated in Figure 1 the rod 10 has indicia markings 12 thereon commencing at the intersection of the flange 11 and rod 10. 65

A second flange 13 is secured to or formed integrally with the rod 10 and extends perpendicularly therefrom, the flange 13 being adjacent the same end of the rod 10 to which the flange 11 is secured. As illustrated in Figure 1, the flange 13 is secured to the face of the rod 10 opposite to the face to which flange 11 is secured such that the flanges 11 and 13 are separated by approximately 180 degrees. In addition the top surface of the flange 13 is in alignment with the first indicia marking on the rod 10 while the bottom surface of the flange 11 is in alignment with the first indicia marking. The reason for this will be presently described. If desired the flange 13 may be secured in 70 75 80 85 90

position by a brace 14 which will insure that the included angle between the brace 13 and rod 10 is 90 degrees.

5 The use of the graduated grading stick of the present invention will be described with reference to a butcher hog but it is to be understood that it may be used as well on other butcher carcasses. In meat packing  
10 establishments the butcher hogs are generally suspended vertically from a moving track and are graded by an inspector as they pass his station. It is therefore important that the inspector have means available for quickly and accurately determining the factors which  
15 affect the grade to be assigned to the butcher hog. The graduated grading stick of the present invention fulfills these requirements.

When it is desired to measure the length of the butcher hog 17 the top of flange 13 is  
20 placed against the bottom of the aitch bone 15 as illustrated in Figure 2. The length of the butcher hog 17 is then read from the indicia marking 12 which intersects the lower edge of the first rib 16. It can there-  
25 fore be seen that the rod 10 must be as long as the greatest length of butcher hog 17 to be measured. In addition, for an accurate reading the indicia markings 12 must com-  
30 mence at the intersection of the top surface of the flange 13 with the rod 10.

The use of the graduated grading stick of the present invention in measuring the back fat thickness of a butcher hog is illustrated in Figure 3. The rod 10 is placed horizontal  
35 to the butcher hog 17 at the tenth rib 18 so that the inner surface 19 of flange 11 is hooked over the back 20 of the butcher hog 17. The back fat thickness is then read from the indicia marking 12 which corre-  
40 sponds to the intersection of the front 21 of the butcher hog 17 with the indicia marking 12. It can therefore be seen that for an accurate reading of the back fat thickness the indicia markings 12 must commence at  
45 the intersection of the bottom surface 19 of the flange 11 with the rod 10.

What has been described is a graduated grading stick which will quickly and easily  
50 permit the measurement of carcass length and back fat thickness with one instrument. These two measurements in conjunction with the carcass weight are pertinent factors in determining the carcass grade. It is to be

understood that only one embodiment of the invention has been described and that modifi- 55 cations may be made thereto without departing from the scope of the invention as defined in the appended claims.

#### WHAT WE CLAIM IS:—

1. A graduated grading stick comprising 60 an elongated rule piece having graduated scale indicia marked thereon, a first flange member attached to one end of said rule piece and projecting laterally therefrom, the inner side of said first flange member 65 being disposed at the zero position of said scale, and a second flange member attached adjacent said one end of said rule piece and projecting laterally therefrom in the direction opposite to said first flange member at a posi- 70 tion at which the outer side of said second flange member is disposed at the zero position of said scale.

2. A graduated grading stick according to claim 1 which is adapted selectively to 75 measure the back fat and carcass length of butcher carcasses working from the belly side of the hanging carcass.

3. A graduated grading stick according to claim 1 or 2 wherein said first and second 80 flange members and said rule piece are rectangular in cross-section.

4. A graduated grading stick according to any one of the preceding claims in which said first flange member is adapted to hook the 85 grading stick over the back of the carcass whereby the back fat thickness can be read on said graduated scale and said second flange member may be placed adjacent the bottom of the aitch bone of the carcass to 90 read carcass length along said graduated scale.

5. A graduated grading stick according to any one of the preceding claims in which a brace is disposed between said second flange 95 member and said rule piece whereby said second flange member is maintained in a lateral position in relation to said rule piece.

6. A graduated grading stick substan- 100 tially as hereinbefore described with reference to the drawings.

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COMPLETE SPECIFICATION

1 SHEET

This drawing is a reproduction of  
the Original on a reduced scale.

Fig. 1.

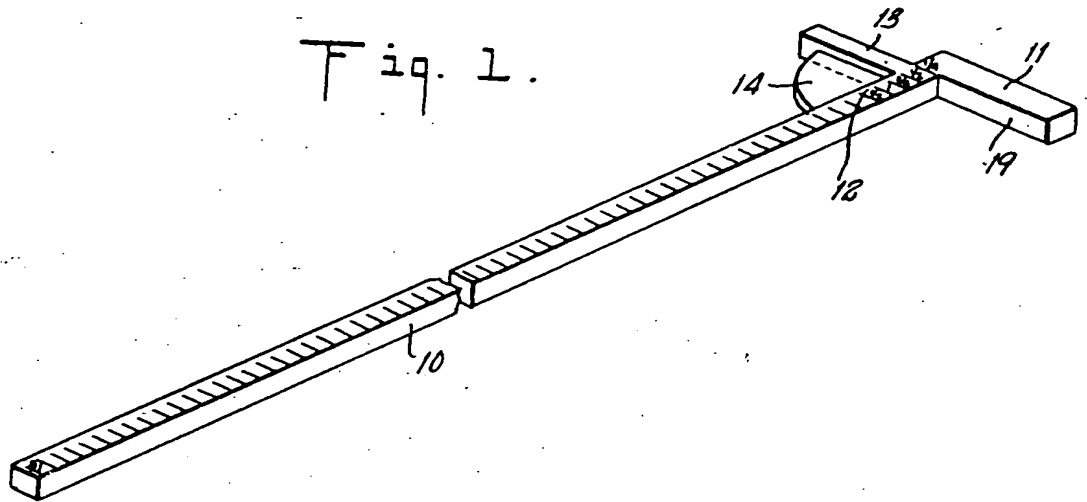


Fig. 2.

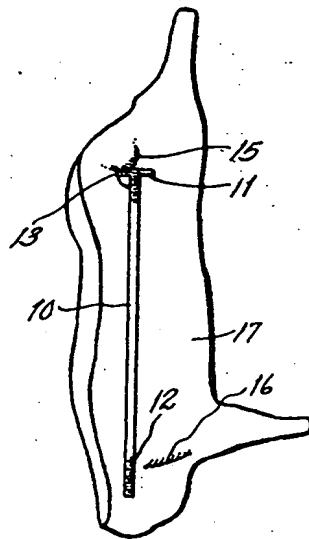
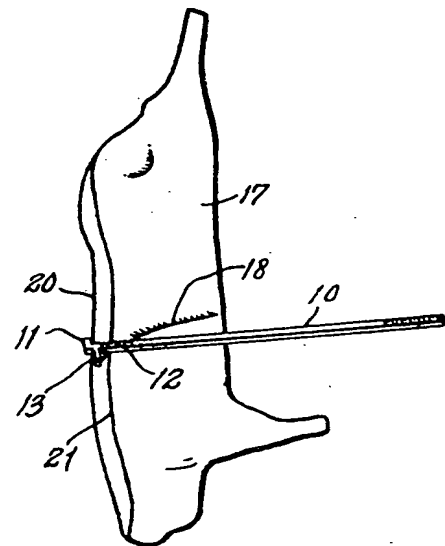


Fig. 3.



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